



VALVES

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VALVES

NRV-Non Return Valve

Product group:	Valves
Title:	NRV-Non Return Valve
Standards:	TC according to DIN 32676 series B (ISO 1127)
Material:	Casing: Steel-No: 1.4435 BN2 (Fe < 0,5%) acc. EN 10088 Springmaterial and Spider: 1.4435 / Bearing bush: 1.4435 BN2 with PTFE Seals: EPDM as standard
Working temperature:	max. 80° C
Sterilization temperature:	150° C
Opening pressure:	see additional datasheet for NRV-Spring Specification
Working Overpressure:	max 10 bar g
Type of construction / Surface quality:	Surfaces interior: metal, shiny. Surfaces exterior: metal, shiny. Ra inside < 0,4 µm
Pipe-Hygienic Classes:	H 3 / H 4 acc. DIN 11866
Marking:	Manufacturer-Name, Batch-Number, Flow-Direction
Certificates:	Certificate according EN 10204-3.1
Option:	Electro-polishing. Upon request: Material certificates and test logs Documentation: Material certificates and Pressure-Test-Protocol NRV-Non Return Valves in OD-Tubing: on request available
Remarks:	Technical contents are subject to change

Dimensions for NRV-Non Return Valve						
Sizes	A	ID	AD	L1	L	Item-Number
according DIN 32676 Reihe B (ISO 1127)						
NRV DN 8	25.0	10.3	50.5	46.0	107.0	272.008.102
NRV DN 10	25.0	14.0	50.5	46.0	107.0	272.010.142
NRV DN 15	50.5	18.1	64.0	51.0	117.0	272.015.181
NRV DN 20	50.5	23.7	64.0	51.0	117.0	272.020.237
NRV DN 25	50.5	29.7	77.5	51.0	117.0	272.025.297
NRV DN 32	64.0	38.4	91.0	51.0	117.0	272.032.384
NRV DN 40	64.0	44.3	91.0	51.0	117.0	272.040.443
NRV DN 50	77.5	56.3	106.0	51.0	117.0	272.050.560
NRV DN 65	91.0	72.1	119.0	51.0	117.0	272.065.719
NRV DN 80	106.0	84.3	180.0	70.0	160.0	272.080.840

The drawing shows a cross-section of the NRV valve. It features a central spring mechanism. Dimension 'L' is indicated as the length of the valve body from the inlet to the outlet. Dimension 'L1' is indicated as the length of the valve body from the inlet to the spring mechanism.

VALVES

NRV-Non Return Valva - Gasket-Kid

Product group:	NRV check valves
Title:	NRV-Non Return Valva - Gasket-Kid
Standards:	CONNECTORS Standard
Material:	As per table below
Sterilization temperature:	EPDM: 132°C (shortly up to 150°C), Silicone, Viton® and Teflon® (PTFE): 150°C
Type of construction / Surface quality:	CONNECTORS Standard
Marking:	-
Certificates:	FDA-Conformity
Option:	-
Remarks:	Technical contents are subject to change The Gasket-Kit can be exchanged by other materials werden Viton® and Teflon® are registred trademarks of DuPont Dow Elastomers

Item-Numbers for NRV-Non Return Valve - Gasket-Kit					
Sizes	EPDM	Silicone	Viton®	Teflon® PTFE	
acc. ISO 1127	Item-Number	Item-Number	Item-Number	Item-Number	
NRV DN 8/10	272.000.008	272.001.008	272.003.008	272.002.008	
NRV DN 15/20	272.000.015	272.001.015	272.003.015	272.002.015	
NRV DN 25	272.000.025	272.001.025	272.003.025	272.002.025	
NRV DN 32/40	272.000.032	272.001.032	272.003.032	272.002.032	
NRV DN 50	272.000.050	272.001.050	272.003.050	272.002.050	
NRV DN 65	272.000.065	272.001.065	272.003.065	272.002.065	
NRV DN 80	272.000.080	272.001.080	272.003.080	272.002.080	
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NRV Check Valve / Spring Forces

Product group:	Valves
Title:	NRV Check Valve / Spring Forces
Material:	Springmaterial: 1.4435
Options:	Spring-tolerances on request available
Certification:	Material certificate according to EN 10204 2.2 or 3.1
Remarks:	Technical contents are subject to change

Springforces and opening pressures for NRV-Non Return Valves												
Sizes	Spring 0.3 kg	Spring 0.4 kg	Spring 0.7 kg	Spring 1 kg	Spring 1.5 kg	Spring 2 kg	Spring 2.5 kg	Spring 3.0 kg	Spring 3.5 kg	Spring 4.0 kg	Spring 6.0 kg	Spring 8.0 kg
Opening-Pressure in bar g regarding to DN												
NRV DN 8	0.17	0.16	0.29	0.41	0.61	0.82	1.02	1.22	1.43	1.63	2.45	3.26
NRV DN 10	0.17	0.16	0.29	0.41	0.61	0.82	1.02	1.22	1.43	1.63	2.45	3.26
NRV DN 15	0.09	0.10	0.17	0.24	0.36	0.48	0.60	0.72	0.84	0.97	1.45	1.93
NRV DN 20	0.09	0.10	0.17	0.24	0.36	0.48	0.60	0.72	0.84	0.97	1.45	1.93
NRV DN 25	0.03	0.04	0.07	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.60	0.79
NRV DN 32	0.02	0.02	0.04	0.05	0.08	0.11	0.14	0.16	0.19	0.22	0.33	0.44
NRV DN 40	0.02	0.02	0.04	0.05	0.08	0.11	0.14	0.16	0.19	0.22	0.33	0.44
NRV DN 50	0.01	0.01	0.02	0.03	0.05	0.07	0.09	0.10	0.12	0.14	0.21	0.28
NRV DN 65	0.01	0.01	0.02	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.14	0.19
NRV DN 80	On request.											

VALVES

Tri-Clamp Butterfly Valve

Product group:	Ventile
Title:	Tri-Clamp Butterfly Valve
Standards:	TC nach DIN 32676 Reihe C (ASME BPE 2009)
Material:	Solid: 316L, Gasket-material: EPDM, Handle: 1.4301
Working Temperature:	-10° C to +150° C (Depends on Gasketmaterial)
Automatisation:	Manual with 5-step lock Drive unit: air-opening and spring-closing or turned around
Working Pressure:	-0.9 to 10 bar
Type of construction / Surface quality:	Inside surface: grinded and polished. Outside surface:metall-blank. Ra inside < 0,8 µm
Pipe-Hygienic Classes:	H 3 acc. DIN 11866
Marking:	Marking with Manufacturer-Name and Dimension
Certificates:	Acceptance certificate 3.1B
Option:	On request: Inside surface with Ra < 0,4 µm On request: also with Gasketmaterial: Viton® or Silicone available For pneumatic drive-unit: use Item-Number 270.061.100
Remarks:	Technical contents are subject to change Viton® is a registred trademark of DuPont Dow Elastomers

Dimensions for Tri-Clamp Flap Valve						
Sizes	A	ID	L	B	C	Item-Nr.
nach DIN 32676 Reihe C (ASME BPE 2009)						
1"	50.5	22.1	60.0	90.0	39.5	271.010.003
1 1/2"	50.5	34.8	60.0	94.0	43.5	271.015.003
2"	64.0	47.5	60.0	101.0	50.5	271.020.003
2 1/2"	77.5	60.2	60.0	107.0	57.0	271.025.003
3"	91.0	72.9	60.0	113.0	63.0	271.030.003
4"	119.0	97.4	100.0	129.0	79.0	271.040.003

The drawing shows a side view of the valve with a handle. Dimension A is the width of the valve body. Dimension B is the height of the valve body. Dimension C is the length of the valve body. Dimension L is the total length of the valve assembly including the handle.

VALVES

Sterile-Air-Bleeder and Take-Off Valve

Product group:	Valves
Title:	Sterile-Air-Bleeder and Take-Off Valve
Standards:	Connectors standard with TC according to DIN 32676
Material:	Solid: 1.4435 acc. EN 10088, Valve-Sealing: Teflon® (PTFE) O-Ring-Protection Seal: Viton®
Working Temperature:	-10° C to +150° C
Type of construction / Surface quality:	Inside surface: Ra < 0,8 µm, Outside surface: metal blanc
Pipe-Hygienic Classes:	H 3 acc. DIN 11866
Marking:	Marking with Manufacturer-Name and Batch-Number
Certificates:	Certificate acc. EN 10204-3.1, FDA-Certificate for Seals
Option:	On request: Inside surface with Ra < 0,4 µm Available upon request with safety lock
Remarks:	Technical contents are subject to change Viton® and Teflon® are registered trademarks of DuPont Dow Elastomers

Dimensions for Sterile-Air-Bleeder and Take-Off Valve					
Typ	A	AD	ID	L	Item-Nr.
With Tri-Clamp Adaption					
E-V DN 6 TC	25.0	6.0	3.0	43.0	269.010.000
E-V DN 8 TC	25.0	8.0	4.0	53.0	269.015.000
Typ	G	AD	ID	L	Item-Nr..
With Thread-Connection					
E-V DN 6 R 1/8	R 1/8	6.0	3.0	35.0	269.010.006.G
E-V DN 8 R 1/4	R 1/4	8.0	4.0	42.0	269.015.008.G
Typ	S	AD	ID	L	Item-Nr.
With Butt Weld End					
E-V DN 6 BW	10.0	6.0	3.0	43.0	269.010.006.A
E-V DN 8 BW	12.5	8.0	4.0	53.0	269.015.008.A

